REMARKS

Claims 12, 13, 24 and 37 have been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention. The applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated **February 13, 2003**.

Claims 1-38 remain in this application. Claims 1 – 10, 26-36 and 38 have been withdrawn, Claims 11-25 and 37 have been rewritten and reconfigured as new claims 1-15.

Objection to the Specification

Claim 11 is objected because of a minor informality. Taking the Examiner's comments into consideration, claim 11 has been amended. Therefore, withdrawal of the objection to claim 11 is respectfully requested.

Claim Rejections under 35 USC §112

Claims 1-10, 12, 23-24 and 29 are rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-10 and 29 have been canceled.

Taking the Examiner's comments into consideration, claims 12 and 24 have been amended. Therefore, withdrawal of the rejection of Claims 1-10, 12, 23-24 and 29 under 35 USC §112, second paragraph, is respectfully requested.

Claim Rejections under 35 USC §103

Claims 1-38 are rejected under 35 USC §103(a) as being unpatentable over Moore et al. (U.S. Patent No. 5,630,127).

Moore et al. describes a rule-based management information system that performs risk and exposure calculations based upon the rules. These rules are stored in a database as objects in an object oriented programming language. When the system is to perform a risk calculation, an application program retrieves the rule from the database and executes it. The rules are stored in the form of a table. A user may modify or create a rule for use by the system. The system provides greater flexibility in terms of modifying or creating rules, since a programmer is not required to modify code to modify or create a rule.

The present invention is a financial risk management system based upon object oriented principles. The system is able to perform simulations on imaginary financial transactions or actual financial transactions. Objects and their associated methods are stored in a database for quick retrieval.

The present invention differs from Moore et al. by having a virtual transaction unit in which a compound transaction characteristic computation unit is used. This compound

transaction characteristic computation unit sequentially accesses a transaction entity modeling unit in a reference information group and obtains results by executing a current price evaluation operation unit. Via this method characteristics of transactions may be computed.

However, the Examiner asserts that Moore et al. describes an exposure calculations or virtual compound transaction entity modeling means in column 2, lines 15-25. The Examiner's assertions are respectfully traversed since this passage merely describes performing risk and exposure calculations and not the foregoing details as recited in the claims. Further, the reference document by Moore et al. (U.S. Patent No. 5,630,127) merely brakes up a calculation expression into a table expression as shown in Fig. 3 of the document, and does not disclose virtual transaction scheme that the present invention discloses.

More definitely, the present invention is characterized in that each object-oriented unit transaction modeling means that encapsulates definitions and interfaces of calculation expressions into itself performs calculation of transaction evaluation for each unit transaction period, and in that information obtained from each unit transaction modeling means is collected and unified. On the contrary, the document by Moore et al. merely calls a data in the table an object, simply shows calculation procedures using the table, and does not suggest any object-oriented calculation operations.

Although the Examiner indicates that Moore et al. teach a financial risk management apparatus comprising one or more virtual transaction (compound transaction) entity means within the system (see Figure 1 and Figure 2), no evidences that support the indication are clearly

shown. The indication is clearly incorrect as explained above and technological concepts of the reference document by Moore et al. and the present invention are totally different each other.

The second aspect of the present invention, claim 11 and its dependant claims 12-25, have original and unique features that the U.S. Patent 5,630,127 by Moore et al. has not disclosed. That is, in the second aspect of the present invention, in claim 11 of the present invention, cash flow type transaction entities are collectively managed as a set of cash flow elements (CashFlowLet) for each unit transaction period 204 in each of the receiver 202 and the payer 203, and each element is collected by the transaction sequence modeling unit 211 that refers to the element.

On the contrary, however, no such configurations are disclosed in the U.S. Patent 5,630,127 by Moore et al. for cash flow type transactions entities as the second aspect of the present invention discloses wherein a predetermined transaction period 201 is divided into each unit transaction period 204 in each of the receiver (receipt side) 202 and the payer (payment side) 203, and wherein the current price evaluating operation is performed for each unit transaction period 204.

Furthermore, in the present invention, various 'exchange-based' cash flow type transactions can be collectively modeled by the transaction sequence modeling unit 211 that refers to and collects information from the elements with diversified reference types. As a result, the system configuration of the financial transactions modeling apparatus can be compact, thereby considerably reducing development and sales costs. It is not necessary that the payment

for financial transactions should be made by currency. It can also be made by bonds, shares,

commodities, etc. In this case, the current price evaluating operation unit 204 in the unit

transaction modeling unit 207 can compute a future value index by performing a current price

ratio operation in accordance with an interest, an earning rate, or a price in the payment unit of

financial transactions (for example, the number shares) in the corresponding unit transaction

period 204. That is, according to the second aspect of the present invention, the exchange-based

cash flow type transactions can be collectively processed for any unit of financial transaction

object.

Therefore, claims 11 and 37 patentably distinguish over the prior art relied upon, by

reciting, as exemplified by claim 11,

> "A financial transactions modeling apparatus for modeling a transaction sequence settled by settling financial transactions in a predetermined transaction period, comprising: one or more unit transaction modeling means comprising: <u>unit transaction information storage means, provided at each of a receipt side and a payment side of the financial transactions for one or more unit transaction period obtained by dividing the predetermined transaction period for each receipt or payment, for individually storing information about a unit transaction,</u> and current price evaluation operation means in the unit transaction period; and transaction sequence modeling means comprising <u>reference information storage means for holding a reference information group for reference to said unit transaction modeling means corresponding to each of a receipt side and a payment side of the financial transactions,</u> and <u>transaction sequence characteristic computation means for sequentially referring to said unit transaction modeling means from the reference information group in each of the receipt side and the payment side of the financial transactions at a predetermined instruction, performing the current price evaluation operation means and obtaining operation results, and computing a characteristic of the transaction sequence based on each of the operation results.</u>" (Emphasis Added)

Therefore, withdrawal of the rejection of Claims 1-38 under 35 USC §103(a) as being

unpatentable over Moore et al. (U.S. Patent No. 5,630,127) is respectfully requested.

Conclusion

In view of the aforementioned amendments and accompanying remarks, claims, as amended,

are in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the

Examiner is requested to contact Applicants undersigned attorney at the telephone number indicated

below to arrange for an interview to expedite the disposition of this case.

U.S. Patent Application Serial No. **09/486,341**
Atty. Docket No. **000104**

In the event that this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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